

2024 REGIONAL TRANSPORTATION PLAN Technical Appendix A: Historical Context and the Future of Transportation



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Technical Appendix A: Historical Context

Cape Cod and its transportation system is a story of a continually evolving community with everchanging transportation needs. This appendix will touch on how the region arrived where it is today, what today's transportation landscape looks like, and what are the challenges and opportunities that lie ahead is maintaining the region's connection to the past while looking toward the future.

Additional information on the region's development and land use patterns over time has been compiled by the Cape Cod Commission and is available in an online Chronology Viewer. The Cape Cod Commission Chronology Viewer is available at:

www.capecodcommission.org/chronology/

The Chronology Viewer explores how the population is changed over time, where and when houses where constructed, and when key infrastructure was developed.

RESOURCE DEPLETION, TECHNOLOGICAL CHANGE, AND GOVERNMENT POLICY

Cape Cod's development and economy have been heavily influenced by three factors:

- Resource depletion,
- Technological change, and
- Government policy.

The Cape has seen many ways of making a living come and go as a result of these three factors. These include agriculture, fin fishing, shell fishing, whaling, salt, limited clothing and shoe manufacturing, and glass manufacturing. The Cape's current economy is dominated by tourism.

The Mashpee Wampanoag Tribe were stewards of these lands and resources for thousands of years. At the time the Cape was settled by Europeans in the colonial period it was rich in natural resources including hardwood forests, fertile soil, and waters teaming with marine life. By the end of the Colonial period the region has been clear cut and the soils exhausted.

The overcutting of woodlands and excessive farming had reduced soil fertility, resulting in lower than average crop yields. The lack of ground cover, combined with the effects of wind and water, resulted in

topsoil being eroded away, to one-third or one-half their 17th-century depths. This erosion may have been in part responsible for the silting in of numerous harbors and for the death of oyster beds.

Historical & Archaeological Resources of Cape Cod & the Islands, Massachusetts Historical Commission, 1986

The region had to import wood to heat homes and cook. Whaling on the Cape started with salvaging dead or stranded whales off the beach; by the end of that industry ships were sailing all the way to the South Pacific to find whales. Fishing peaked in 1851, employing over 3,200 in the industry. Like whaling, fishing was initially a near shore activity but gradually moved farther off shore as stocks were depleted. Today we face the near if not complete collapse of the cod fishery for which the peninsula is named. Even tourism is now threatened by environmental damage due to over development. Ponds and estuaries that were once pristine are clouded, mucky, and in some cases, devoid of marine life. Shell fishing beds are gone and swimming is no longer desirable in some places. Time will tell the fate of the tourism industry on Cape Cod.

Changes in technology have had a major impact on the economic and social history of the Cape. Technology has changed the scale of commercial activity everywhere by increasing both productivity and distribution. Advances in productivity, have in some cases accelerated the resource depletion discussed above.

By the early 1890s, Barnstable, Brewster, Wellfleet, Truro, and Province town had all built large numbers of these traps and weirs to supply both fish for market as well as bait for fishing vessels. Extensive trapping, however, had a severe effect on fish populations. When the mackerel disappeared from New England waters in the mid-1880s, many blamed the use of these traps.

Historical & Archaeological Resources of Cape Cod & the Islands, Massachusetts Historical Commission, 1986

The discovery of new resources elsewhere also had a great impact on major regional industries. For example, the opening of the first commercial oil well in Pennsylvania in 1859 significantly reduced the demand for whale oil for lighting. But transportation technology has possibly the greatest impact on the way of life, economy, and level of development on Cape Cod. The railroads brought the first significant influx of tourist, particularly summer residents, to the Cape as early as 1870.

None, however, were more prominent in their resort success than the Woods Hole Branch, opening in 1872. Although organized initially to serve the guano works at Woods Hole, the line quickly became instrumental in the development of Bourne, Falmouth, and, through the ferry terminal at Woods Hole, Martha's Vineyard and Nantucket. Small villages from Buzzards Bay to Woods Hole sprouted hotels and resort communities almost overnight.

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Historical & Archaeological Resources of Cape Cod & the Islands, Massachusetts Historical Commission, 1986

The salt industry is perhaps the best example of how government action impacts the economy. The industry was made viable by a tariff placed on imported salt by the US government along with a subsidy to domestic manufacturers. Combine with improvements to the evaporation process, this led to a thriving salt industry on the Cape from the late 1700's to 1840's. At its peak, every town except for Mashpee and Bourne had multiple saltworks lining their beaches. But the industry virtually collapsed when the subsidy was removed and the US reduced the tariff on imports of salt.

Probably the chief reason for the decline in production, however, was the lowering of the duty on imported salt. Ever since 1790 there had been a duty of at least ten cents a bushel... In 1842, the duty on imported salt fell to 8¢ a bushel, and in 1846 it was changed to a 20% ad valorem scale, greatly to the advantage of foreign sources.

Historical & Archaeological Resources of Cape Cod & the Islands, Massachusetts Historical Commission, 1986

Another example of the government's role in the Cape's economy is its investment in roads, particularly interstates, in the 1950's. This changed the nature of tourism on Cape Cod as well as the development patterns which to date had been fairly concentrated in villages accessible by rail. This coincided with a stronger middle class with disposable income and a reduction in the cost of construction. Sprawling auto-oriented development has dominated since that time and been reinforced by zoning rules.

TRANSPORTATION INFRASTRUCTURE DEVELOPMENT

Cape Cod's transportation system has both shaped and been shaped by development patterns of the region. As our regional economy has evolved so too has our transportation infrastructure. From a reliance on ports and marine transport, to a steady growth by rail, and explosion of change fueled by the automobile – our region has undergone dramatic changes.

Early Trail and Road Network

EARLY TRAILS

Before European settlers landed on Cod Cape, Native Americans, including the Mashpee Wampanoag Tribe, had established a network of trails throughout the region. Linking up key geographic locations and important natural resources, many of these trails evolved into roadway connections we are familiar with today.

CONTACT (1500 - 1620) AND PLANTATION (1620 - 1692) PERIODS

By the time the Pilgrims arrived, there was an extensive trail network stretching from one end of the region to the other as shown in Contact Period map in Figure 1. Even this far back, we can see connections that would eventually become the road network of Cape Cod. As Native Americans and Europeans used the network more extensively, trails were upgraded to cartpaths or roadways. As shown in Figure 1 portions of present-day Route 6A took shape as County Road.¹

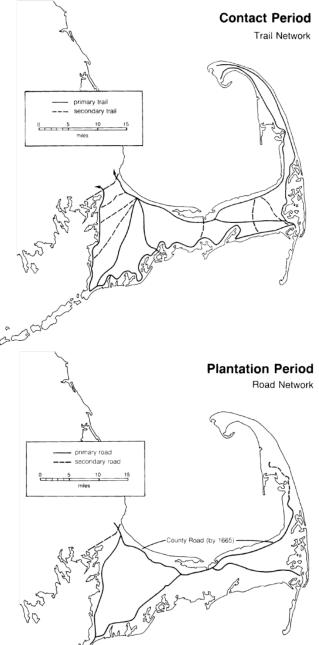


FIGURE 1. Early Trail and Road Network¹

¹ Historic & Archeological Resources of Cape Cod & the Islands. Massachusetts Historical Commission. Originally published August 1986. PDF reprint version, 2007.

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Expansion of Water Routes

COLONIAL (1692 - 1775) AND FEDERAL (1775-1830) PERIODS

As local transportation and commerce increased, water routes were the life blood of the region. Land routes were improved, widened, and expanded to support connection to the ports. Figure 2 shows the expansion of the road network and connection to water routes in these periods.¹

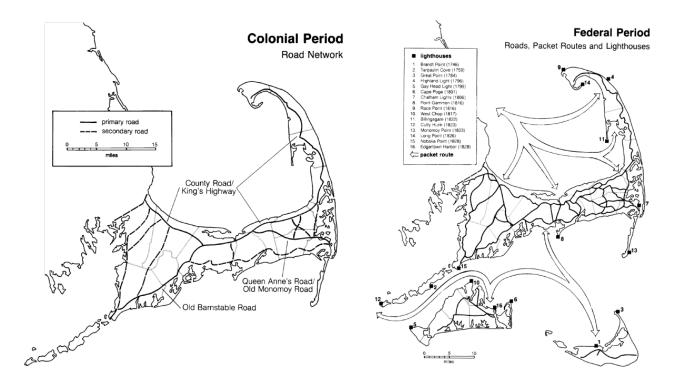


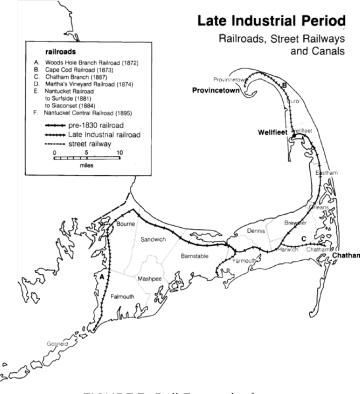
FIGURE 2. Expansion of Water Routes and Land Connections¹

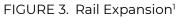
Expansion of Railroads

EARLY AND LATE INDUSTRIAL PERIODS (1830-1915)

The industrial period saw the development and expansion of railroads across the region. Still tied to major ports, as shown in Figure 3, rail served both freight-needs as well as the emerging tourism market.

This period saw multiple expansions of the rail network ultimately including connections to almost every town on Cape Cod. As the rail network expanded, development grew up around the train depot. These pockets of development thrived while rail transportation dominated the region. As the predominance of rail waned, some of these developments evolved to meet new needs while others did not.¹





Age of the Automobile

MODERN PERIOD TO PRESENT DAY (1915-)

The emergence of the automobile and tourism industry on Cape Cod forever changed the transportation network of the region. Construction of the Cape Cod Canal redefined the transportation landscape of the region. Expanding from the Cape Cod Canal, the transportation system was significantly expanded and modernized during the 20th century. As shown in the Table 1, some of greatest expansions occurred in the 1950's.

YEAR	MILESTONE
1935	Bourne, Sagamore, and Railroad bridges over the Cape Cod Canal
1950	Rt. 6: Sagamore Bridge to Hyannis (exit 6) – 2 lanes
1954	Rt. 6: Sagamore Bridge to Hyannis (exit 6) – 4 lanes
1955	Rt. 6: Hyannis (exit 6) to Dennis (exit 9) – 2 lanes
1956	Rt. 6: Dennis (exit 9) to Harwich/Brewster (exit 11) – 2 lanes
1958	Rt. 6: Harwich/Brewster (exit 11) to Orleans (exit 12) – 2 lanes
1959	Rt. 6: Orleans (exit 12) to Orleans/Eastham Rotary – 2 lanes
1967	Rt. 6: Hyannis (exit 6) to Yarmouth (exit 7) – 4 lanes
1971	Rt. 6: Yarmouth (exit 7) to Dennis (exit 9) – 4 lanes
1987	Route 25: East Wareham (I-195) to Bourne Bridge – 6 lanes

TABLE 1. Industrial Period Rail Expansion

Sixty-five years after that great expansion, the region is struggling to face tomorrow's challenges with an aging transportation network. Most notably with the impending replacement of the Bourne and Sagamore Canal Bridges at the forefront. While there is debate over whether we are still in the age of the automobile, it is clear that investments in all modes are required to meet the region's future transportation needs.

HISTORIC PRESERVATION TOOLS

Cape Cod towns utilize a wide variety of tools to protect their historic resources. The most commonly used are local historic districts and demolition delay bylaws, though many towns have also adopted more specialized regulations. Some historic resource protections are initiated by town historical commissions, while others are spurred by planning boards, nonprofit historic societies, and neighborhood groups. Key information about tools such as historic inventories and districts is available at the Massachusetts Historical Commission (MHC)².

While these preservation tools are primarily applied to the demolition or modification of structures, a number of the tools apply to roadway work as well.

² <u>http://www.sec.state.ma.us/mhc/mhcidx.htm</u>

Inventories

Inventory is an important first step toward protecting a community's historic resources. Historic inventories can be used to teach people about their community's history and to guide town boards in future land use decisions. The MHC provides standardized inventory forms for different types of historic resources. The forms are typically filled out by local historical commission members, volunteers, or private consultants, and many Cape towns have sought grants to support this work. Completed forms are kept both in the town and at MHC, which provides online access through its MACRIS database.³

Local Historic Districts

Local Historic Districts require review by a historic district commission for any exterior alteration to buildings and structures visible from a public way.

On Cape Cod, local historic districts in the towns of Barnstable, Dennis, Eastham, Harwich, and Provincetown were created under Chapter 40C (the Historic Districts Act) of Massachusetts General Law. The towns of Chatham and Falmouth have established local historic districts under special legislation. The Old Kings Highway Regional Historic District, covering portions of Sandwich, Barnstable, Yarmouth, Dennis, Brewster and Orleans, was also created by a special act of legislation. (See Figure 4)

National Register Buildings and Districts

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.⁴

National Register of Historic Places offers special protection for individual historic

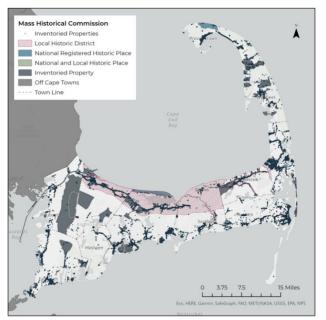


FIGURE 4. State Registered Historic Districts and Places

³ <u>http://mhc-macris.net/</u>

⁴ <u>http://www.nps.gov/nr/</u>

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buildings and properties in historic districts on Cape Cod. As shown in Figure 4, historic properties are spread across Cape Cod In addition to protections under local historic districts; the Cape Cod Commission Act⁵ provides additional protections. Under the Cape Cod Commission Act, demolition or substantial alteration of National Register properties, whether individually listed or part of a National Register Historic District, are subject to review by the Cape Cod Commission if there is no other historic district protection in place. In addition, there are hundreds of other historic locations across Cape Cod that have not yet been inventoried by the National Register of Historic Places.

Preservation Bylaws

- Demolition Delay Bylaws create time to explore alternatives to demolition of historically significant buildings. Any demolition permit request is reviewed by the Historical Commission to determine if a building is "preferably preserved" and if a delay period should be imposed. On Cape Cod, delay periods range from 6 to 18 months. See the Cape Cod Commission's Demolition Delay Network⁶.
- Overlay Districts create special zoning regulations for unique areas. Brewster's Corridor Overlay Protection District limits the scale and massing of commercial buildings along historic Route 6A. The Village Commercial Overlay District in Harwichport allows smaller setbacks and mixed uses consistent with historic development patterns. The Cape Cod Commission's Village Development Model Bylaw⁷ guides small-scale, mixed-use development in village centers. It can be established as an overlay district or as a standalone zoning district.
- Archaeological Resource Districts aim to protect archaeological sites by limiting ground disturbance in sensitive areas. The towns of Barnstable and Brewster protect historic values in their Wetland Protection Bylaws, using Massachusetts Historical Commission review to help determine if an area is likely to have archaeological significance.
- Scenic Road Bylaws protect trees, stone walls, and features that fall within the right-of-way of designated roads. A planning board hearing is required prior to repair, maintenance, reconstruction, or paving work if it would involve removal or cutting of trees, or destruction of stone walls within the road right-of-way. It does not address trees or walls on adjacent private property. Barnstable, Falmouth, and Sandwich coordinate their scenic road reviews with the Planning Board, Department of Public Works, Tree Warden, and Historical Commission.

⁵ <u>http://www.capecodcommission.org/aboutccc/act</u>

⁶http://www.capecodcommission.org/resources/regulatory/HistoricPreservation_CCCActandNationalRegi ster.pdf

⁷ <u>http://www.capecodcommission.org/resources/bylaws/village.doc</u>

 Districts of Critical Planning Concern are a tool created by the Cape Cod Commission Act to protect special resource areas. Towns nominate an area to the Cape Cod Commission and work with Commission staff to craft regulations that protect the district. The Designated DCPCs page⁸ describes the Centerville Village, Craigville Beach, and Sandwich Three Ponds DCPC regulations to protect cultural and scenic resources.

Preservation Restrictions

Preservation Restrictions and Conservation Restrictions are legal agreements used to protect historic buildings and lands from change. The restrictions are drawn up by the property owner and a nonprofit preservation group or a government entity that is in charge of their enforcement. Restrictions can be placed on buildings or on land, and may also be used to protect archaeological resources hidden beneath the surface of the land.

The Massachusetts Historical Commission holds Preservation Restrictions on numerous Cape properties that have received preservation grant monies. Preservation Restrictions are required for some projects that use Community Preservation Act (CPA) funding, and many of these restrictions are held by conservation trusts and local historical commissions.

"FUTURE OF TRANSPORTATION IN THE COMMONWEALTH" REPORT

With many changes facing the transportation system in the coming decades, the Cape Cod MPO looks to work with state and federal agencies to understand and plan for these changes. The Commonwealth of Massachusetts in a leader in transportation profession in terms of forward-thinking transportation planning and policy. The report, "Future of Transportation in the Commonwealth" Report, covers a number of key topics that are relevant to the Cape Cod region.

In January of 2018 Governor Baker established the Commission on the Future of Transportation to investigate the following topics as they affect transportation during the 2020-2040 time span:

- Climate and Resiliency
- Transportation Electrification
- Autonomous and Connected Vehicles
- Transit and Mobility Services
- Land Use and Demographics.

⁸ <u>http://www.capecodcommission.org/departments/planning/DCPC/designated</u>

The Governor's commission identified the following 18 recommendations for how to best prepare Massachusetts' transportation network for the challenges and opportunities of 2040. A discussion from the Cape Cod MPO perspective is included following each recommendation and is shown in *italics*.

1. PRIORITIZE INVESTMENT IN PUBLIC TRANSIT

The Commonwealth must continue to focus on modernizing its existing public transit assets, including vehicles, to prepare the current system to perform better long before 20440. The public transit agencies of Massachusetts need to reinvent transit operations to offer better, more responsive, and more customer-focused service, in concert with new mobility. *As an MPO partner, the Cape Cod Regional Transit Authority (CCRTA) continues to innovate and expand its services. For example, the CCRTA has been integrating support for bicyclists with transit service and adopting ride sharing services as part of its network.*

2. TRANSFORM ROADWAYS AND TRAVEL CORRIDORS

MassDOT, municipalities, and other roadway owners should redesign them to prioritize personthroughput rather than vehicle-throughput, so that limited corridor capacity is allocated to moving as many people as possible, while accommodating mobility alternatives. *Several communities in Barnstable County have already expressed interest in MassDOT's "Complete Streets" program; the Town of Sandwich has received funding through the program; the Cape Cod Commission has completed a prioritization plans in a number of Cape Cod towns as detailed at*

<u>www.capecodcommission.org/CompleteStreets</u>. Applying Complete Street's principles has and will continue to improve state and local roads to accommodate all users. In addition, accommodating transit service can lead to increased use of intercity buses thereby shifting travelers away from personal automobiles.

3. BETTER MANAGE TRAFFIC CONGESTION

The Commonwealth must consider a full set of options to address roadway congestion, including improvements to public transit, better systems operations, and the consideration of congestion pricing. The Commonwealth should prioritize and target investments in public transit and other high-capacity transportation modes to make these more efficient, attractive, and reliable to reduce single occupancy vehicle (SOV) use, particularly on our most congested roads in the urban core. *The Cape Cod MPO's Regional Transportation Plan has and will continue to support comprehensive strategies to address traffic congestion. Cape Cod is fortunate to have pleasant weather during its busiest season – making bicycling and walking attractive options for shorter trips; additionally, the CCRTA deploys expanded services during the busy season. Intersection operations can be improved through deployment of signal preemption – allowing Opticom-equipped CCRTA buses to improve travel times. The use of Congestion Pricing could be effective both as a traffic management strategy as well has a funding mechanism to support transportation alternatives.*

4. ESTABLISH A COMMONWEALTH TRANSPORTATION TECHNOLOGY TRANSFORMATION INITIATIVE

The Governor's commission believes that we are in the early stages of a transportation revolution as impactful as any that has come before it. In order to harness the talent of our workforce, academia, and innovators to take full advantage of this opportunity, the Commission calls for the establishment of the Commonwealth Transportation Technology Transformation Initiative (T3I) to partner public and private resources with innovators to tackle some of the Commonwealth's most difficult transportation issues. *Cape Cod MPO staff will continue to monitor developments in this area and participate in MassDOT efforts such as training and workshops*.

5. SUPPORT AND ACCELERATE EFFORTS TO CONSUME TRANSPORTATION DIFFERENTLY

MassDOT should lead the development of policies related to changes in mobility practices, including ride-sharing, vehicle-sharing, Mobility as a Service (MaaS), on-demand mobility (ODM), and micro-mobility. The Commonwealth should continue to be an innovation proving ground for shared mobility initiatives. *Cape Cod MPO staff will continue to participate with MassDOT's efforts in this area. One area of emphasis will be to explore deployment of bikeshare, dockless bicycles and/or scooters in some of the Cape's higher-density villages.*

6. PROMOTE A STATEWIDE TELECOMMUNICATIONS INFRASTRUCTURE

The Commonwealth should promote full statewide communications infrastructure (5G, Wi-Fi, and their future counterparts) that can support and enable new transportation technologies and services, from connected and autonomous vehicles (C/AVs), to real-time traffic and asset management systems, to telecommuting opportunities. Since the siting of infrastructure to support new technologies includes municipal approval, MassDOT and other state agencies will need to expedite their review and approval processes while better coordinating them with local communities. *Improving the Cape's wireless communications systems continues to be a priority of the Cape Cod Commission and stakeholders such as OpenCape. Cape Cod MPO staff will continue to work with MassDOT and Cape Cod communities to deploy an improved system.*

7. DEVELOP A STRATEGY TO SUPPORT CONNECTED AND AUTONOMOUS VEHICLES

MassDOT should dedicate resources to the management of an interagency Connected and Autonomous Vehicle (C/AV) Committee, to understand how the Commonwealth can prepare for and maximize the positive impacts of C/AVs. To continue Massachusetts' leadership position, the Governor should consider proposing legislation to establish statutory and regulatory structures that enable the safe and reliable deployment of C/AVs. *C/AVs can be expected to have a significant impact on mobility and traffic operations. Positive impacts include improved safety and efficiency. It is uncertain what effect C/AVs would have on parking demand since the vehicles could operate independently and avoid the need to park (and may circulate on the road network). Another concern is that since the arduous task of driving a car would be eliminated, more people may be attracted to travel* by automobile since they could spend the time working or relaxing. Cape Cod MPO staff will work with MassDOT help prepare the County's transportation system to maximize the benefits and minimize the detriments of C/AV deployment.

8. ENABLE AND PROMOTE A UBIQUITOUS ELECTRIC CHARGING (AND/OR ALTERNATIVE FUEL) INFRASTRUCTURE

The Commonwealth should continue to facilitate the establishment of a statewide electric charging network –and/or the infrastructure needed for other alternative fuels –that is fast, equitable, robust, and resilient in order to support a growing fleet of zero emission vehicles (ZEVs). The Commonwealth should develop standards or incentives for vehicle (driven by humans or driverless) to be electric, to charge during off-peak hours, and to be available to deliver energy back to the grid at peak times. *Cape Cod MPO staff will work with MassDOT to identify strategic locations for deployment of charging infrastructure. Through the County's Regional Policy Plan, the Cape Cod Commission encourages land development projects to include appropriate charging equipment.*

9. ESTABLISH A GOAL THAT ALL NEW CARS, LIGHT DUTY TRUCKS, AND BUSES SOLD IN MASSACHUSETTS WILL BE ELECTRIC BY 2040

Achieving the Commonwealth's 2050 Global Warming Solutions Act (GWSA) mandate will require the near-complete transition of our vehicle fleet (cars, trucks and buses) to electric vehicles or other zero-emission vehicle (ZEV) technology. Because vehicle fleets turn over slowly, for vehicles on the road to be electric by 2050, the Commonwealth should establish the goal for vehicle sales to be electric by no later than 2040 (perhaps sooner in some vehicle classes). *The Cape Cod MPO supports this policy. A comprehensive analysis of a path towards addressing our regional support for these statewide goals are detailed in the Cape Cod Climate Action Plan and the Cape Cod Regional Policy Plan.*

10. ESTABLISH A REGIONAL, MARKET-BASED PROGRAM TO REDUCE TRANSPORTATION SECTOR GREENHOUSE GAS (GHG) EMISSIONS

The Commonwealth should publicly support the prompt development and implementation of a regional program that uses market mechanisms and public investment as a means to limit GHG emissions from the transportation sector. The Commission also recommends exploring the adoption of a regional Low Carbon Fuel Standard. The Massachusetts EOEA has produced a policy statement for a Transportation Climate Initiative (TCI). A goal of this initiative is to "design a regional low-carbon transportation policy proposal that would cap and reduce carbon emissions from the combustion of transportation fuels... and allow each TCI jurisdiction to invest proceeds from the program into low-carbon and more resilient transportation infrastructure." *The Cape Cod MPO staff will work with MassDOT to explore these strategies.*

11. MAKE TRANSPORTATION INFRASTRUCTURE RESILIENT TO A CHANGING CLIMATE

The Commonwealth should develop vulnerability assessments for all publicly-owned or funded transportation infrastructure in Massachusetts across all agencies, the outcomes of which can then

inform capital planning. MassDOT should develop and disseminate resiliency-oriented statewide design standards for transportation infrastructure, including infrastructure owned by the MBTA and the RTAs; by 2020, no transportation-related project should be built that does not conform to those standards. *Cape Cod MPO staff continue to work with member towns to develop plans for strategic improvement of critical transportation infrastructure. This of particular concern to Cape Cod as each of the 15 towns in Barnstable County are of varying degree susceptible to damage from flooding and other hazards associated with climate change.*

12. ENSURE SUFFICIENT ELECTRIC CAPACITY

As electric vehicle penetration accelerates, Massachusetts should work in close coordination with ISO New England (ISO-NE) and other states to ensure that sufficient electricity continues to be available to provide reliable, clean, and competitively priced power supplies for all electricity users in the Commonwealth. *The Cape Cod MPO supports state and local efforts to provide these services.*

13. ADOPT DENSE, MIXED-USE, AND TRANSIT-ORIENTED LAND USE POLICIES

Municipalities should accelerate the adoption of land use regulations that promote density and the use of shared vehicles and active and shared transportation modes. The Commonwealth should consider accelerating local progress in this area through incentives and regulations. *The Cape Cod Commission, through the Cape Cod Regional Policy Plan, works with member communities and developers through regulation and local comprehensive plans to locate development in Activity Centers. These centers are intended to create the density necessary for public transit, bicycling, and walking to succeed as transportation options.*

14. ENABLE GATEWAY CITIES AND THE REGIONS THEY ANCHOR TO COMPETE FOR RESIDENTS AND JOBS

The Commonwealth's transportation providers –including MassDOT, MBTA, and the RTAs –should support opportunities for housing and economic development in Gateway Cities and other regional hubs that have the potential to act as economic anchors within their respective regions. *Cape Cod MPO staff will work with MassDOT to explore this strategy. Part of this effort will be coordinated with the Cape Cod Regional Policy Plan's strategies to guide development.*

15. COORDINATE THE PLANNED REINVENTION OF THE MBTA COMMUTER RAIL SYSTEM WITH LOCAL, REGIONAL, AND STATE LAND USE AND ECONOMIC DEVELOPMENT STRATEGIES

MBTA should work with stakeholders to compile a menu of new service options for the commuter rail network by the end of 2019 and then develop detailed information on the costs (both capital and operating) and benefits of each of the service models. Regional planning officials and local elected officials in commuter rail-served communities should continue to develop plans to support near-term increases in ridership and the transition to broader, interconnected service models, as laid out in the 2019 MBTA Rail Vision Report.. *Cape Cod MPO staff will work with MassDOT to explore extending passenger rail service to Cape Cod communities such as Buzzards Bay and Hyannis. Service to*

these areas has been identified as a priority of several updates of the Regional Transportation Plan and is detailed in the Cape Rail Study⁹.

16. PROVIDE BETTER MOBILITY OPTIONS IN RURAL COMMUNITIES

MassDOT, working with MPOs and local municipalities, should develop strategies for providing rural Massachusetts with viable transportation options to supplement privately-owned vehicles. The Commonwealth should designate appropriate state agencies to work with the private sector to ensure that necessary infrastructure is available to support deployment of C/AV and TNC technologies throughout the state, including in rural areas. Many of Cape Cod's communities share rural limitations such as remoteness from activity centers and lower densities that make transit less viable. Challenges are particularly acute for residents of the Outer Cape towns who must travel great distances for many critical services such as healthcare; this has a direction impact on community health. The trip from Provincetown to the nearest hospital (Cape Cod Hospital in Hyannis) is the longest among all communities across the Commonwealth. *Cape Cod MPO staff will work with MassDOT, the Cape Cod Regional Transit Authority, municipalities, and local transportation, health and community organizations to explore strategies and implement solutions that improve mobility options for the rural communities on Cape Cod.*

17. PREPARE MASSDOT AND OTHER TRANSPORTATION-RELATED ENTITIES TO EFFECTIVELY OVERSEE A CHANGING TRANSPORTATION SYSTEM

To prepare the Commonwealth's transportation system for the inevitable changes of tomorrow, the Governor should consider specific organizational changes to MassDOT and other agencies that allow better focus, alignment, and results, including the continuation of a dedicated MBTA Board, a new paradigm for MassDOT, MBTA, and Regional Transit Authorities, and plans for data-sharing to enable improved services and options for the transportation system. *The Cape Cod MPO supports this effort*.

18. DEVELOP A FISCALLY SOUND AND RESPONSIBLE TRANSPORTATION RESOURCE PLAN

Among the most significant contributions that today's decision makers could make to the public for the year 2040 is to commit to providing sufficient resources for the proper maintenance, operation, and upgrades to the state's transportation network. The Governors' commission concludes its report with this recommendation, not because it is the least important, but because the promise found in our earlier recommendations can only be achieved through a long-term commitment to providing the resources necessary to operate and maintain the Commonwealth's evolving transportation system. This begins with a commitment to eliminate the longstanding backlog of today's identified priority deferred MBTA and MassDOT maintenance projects to achieve safe,

⁹ Cape Rail Study is available at <u>www.capecodcommission.org/CapeRailStudy</u>

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efficient services and asset conditions by 2030. Only then will the Commonwealth be able to fully turn its attention to effectuating the Commission's vision for 2040. *The Cape Cod MPO supports this effort.*

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